

Environmental Protection Agency
Fiscal Year 2011 Program Review
Of the
Texas Commission on Environmental Quality
Public Water Supply Supervision Program

January 17, 2012

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I. Introduction

The Public Water Supply Supervision (PWSS) Program Review meeting was conducted at the Texas Commission on Environmental Quality's (TCEQ) Austin, Texas office on September 28, 2011. The following table contains the meeting attendees.

TCEQ PWSS Program Review Attendee Table:

Name	Affiliation-Division/Area	Email	Phone
Alicia Diehl	TCEQ-WSD	adiehl@tceq.state.tx.us	512-239-1626
Ada Lichaa	TCEQ-WSD	ada.lichaa@tceq.state.tx.us	512-239-6728
Cari-Michel La Caille	TCEQ-WSD	clacail @tceq.state.tx.us	512-239-6479
Cindy Haynie	TCEQ-WSD	cindy.haynie @tceq.state.tx.us	512 / 239-3465
Doug Holcomb	TCEQ-WSD	dholcomb@tceq.state.tx.us	512-239-6947
Elston Johnson	TCEQ-WSD	eljohnso@tceq.state.tx.us	512-239-0990
Gary Chauvin	TCEQ-WSD	gchauvin@tceq.state.tx.us	512 -239-1687
Gary Regner	TCEQ-WSD	gary.regner @tceq.state.tx.us	512- 239-4528
Grant Evans	TCEQ-WSD	gevans@tceq.state.tx.us	512-239-6055
Jack Schultz	TCEQ-WSD	jschulze@tceq.state.tx.us	512 -239-6046
James Beauchamp	TCEQ-WSD	jbeaucha@tceq.state.tx.us	512-239-6174
Joel Klumpp	TCEQ-WSD	joel.klumpp@tceq.state.tx.us	512-239-4453
John Schildwachter	TCEQ-WSD	jschildw@tceq.state.tx.us	512-239-6266
Joy Schultz	TCEQ-WSD	jschultz@tceq.state.tx.us	512-239-3470
June Ella Martinez	TCEQ-WSD	jmartine@tceq.state.tx.us	512- 239-3242
Linda Brookins	TCEQ-WSD Director	lbrookin@tceq.state.tx.us	512-239-4625
Marlo Wanielista Berg	TCEQ-WSD	mberg@tceq.state.tx.us	512-239-6967
Matt Court	TCEQ-WSD	mcourt@tceq.state.tx.us	512- 239-5844
Melinda Torres \	TCEQ-WSD	melinda.torres@tceq.texas.gov	512- 239-5844
Rose Gaza	TCEQ-WSD	rose.gaza@tceq.texas.gov	512- 239-4574
Steve Stubbs	TCEQ-WSD	sstubbs@tceq.state.tx.us	512-239-6343
Teresa Rodgers	TCEQ-WSD	teresa.rodgers@tceq.state.tx.us	512-239-1734
Terry Thompson	TCEQ-WSD	terry.thompson@tceq.state.tx.us	512-239-6095
Vera Poe	TCEQ-WSD	vera.poe@tceq.state.tx.us	512 -239-6988
Blake Atkins	EPA-SDWA	atkins.blake@epa.gov	214-665-2297
Damon McElroy	EPA-SDWA	mcelroy.damon@epa.gov	214-665-7159
Javier Balli	EPA-Grants	balli.javier@epa.gov	214-665-7556
Stacey Dwyer	EPA- SWPB Assoc. Director	dwyer.stacey@epa.gov	214-665-6729

This report reviews TCEQ's PWSS Program under the Safe Drinking Water Act (SDWA). Title 40 of the Code of Federal Regulations (CFR) part 142.17 (a)(1) states: "At least annually the Administrator shall review, with respect to each State determined to have primary enforcement responsibility, the compliance of the State with the requirements set forth in 40 CFR part 142, subpart B, and the approved State primacy program." This review examines TCEQ's drinking water rules implementation and reporting and documents TCEQ's initiatives, activities, and achievements undertaken to meet and/or exceed the national drinking water standards.

TCEQ's Public Drinking Water Section (PDWS) is tasked to implement new and more-protective drinking water rules and undertake data management and reporting challenges. EPA will continue to work in partnership with TCEQ to strengthen the PWSS program, tackle adopting new primacy requirements, enhance program efficiency and compliance determinations, and ultimately assure consumers access to cost effective and superior quality drinking water. EPA recognizes that TCEQ has dedicated staff willing to work to uphold a high quality PWSS program as evidenced in this review.

II. Highlights and Recommendations

1. TCEQ and EPA are pursuing primacy revision approval incorporating five drinking water rules:
 - Long Term 2 Enhanced Surface Water Treatment Rule (LT2)
 - Stage 2 Disinfectants and Disinfection Byproducts Rule (DBP2)
 - Public Notification Rule minor revisions (PN/MR)
 - Lead and Copper Rule Short Term Revisions (LCR/STR)
 - Ground Water Rule (GWR)
2. TCEQ plans to submit two primacy revision applications (reference page 10):
 - LCR/STR, DBP2, LT2, and PN/MR (Four Rule Package).
 - GWR
3. EPA commends TCEQ for Texas water system compliance above the Performance Activity Measures (PAM) expectations illustrated in Appendix F.
4. TCEQ did not achieve the FY 2011 Source Water Protection Performance Measures SP 4(a) & (b) shown in Appendix G. TCEQ should therefore raise implementation efforts to increase the number of Texas community water systems and corresponding population served where risk to public health is minimized through source water protection. EPA recognizes however that this is a voluntary program for the Public Water Systems and that TCEQ has no regulatory authority to compel a Public Water System to implement a Source Water Protection Program.
5. The TCEQ FY 2011 Sanitary Survey Performance Measure (SDW-1a) is 92% as currently filed in SDWIS-TX. This is less than the EPA Target as indicated in Appendix G. The SDW-1a State target is 93%. TCEQ should therefore increase efforts to ensure sanitary surveys at Subpart H systems are completed every three years and that corresponding data is reported to SDWIS-TX.
6. TCEQ continued to improve SDWA federal reporting timeliness, completeness, and the accuracy of public drinking water compliance determinations and inventory data throughout FY 2011.
7. The FY 2011 Enforcement Program Review is available in a separate report.
8. TCEQ is encouraged to draw down DWSRF Set-aside funds for expenses in a timely manner. TCEQ will continue to work with EPA to maximize the effectiveness of DWSRF set-aside funds in the future.
9. The PWS data used for this report was obtained from the SDWIS/Fed (Safe Drinking Water Information System) database as of January 17, 2011 (data frozen January 12, 2011) and does not reflect future updates.

10. Texas PWS MCL violations are summarized in the below table.

FY 2008 to FY 2011 PWS MCL Violations Table

Contaminant	FY 2008	FY 2009	FY 2010	*FY 2011
Arsenic	229	262	355	366
Fluoride	72	93	118	130
Nitrate	114	145	131	151
IOC Total	415	500	604	647
Combined Radium	31	26	51	52
Gross Alpha	10	21	47	41
Uranium	21	8	15	10
Rad Total	62	55	113	103
TCR (MCL)	77	79	100	123
LCR (ALE)	60	39	27	27
TTHM	271	110	211	181
HAA5	78	34	57	33
DBP1 Total	349	144	268	214

*Reference Appendix J – The violation data was obtained from SDWIS/Fed as of January 17, 2011 (data frozen January 12, 2011) and does not reflect future updates.

11. EPA appreciates the continued forthcoming and receptive relationship it has with TCEQ. EPA also recognizes the continued PWSS partnership with TCEQ in such areas as EPA program reviews, disaster response, conferences, pilot project(s), and other initiatives.

III. Texas Drinking Water System Universe

Public water systems (PWS) provide water for human consumption through pipes or other constructed conveyances to at least 15 service connections or serve an average of at least 25 people for at least 60 days a year. EPA has defined three types of public water systems:

1. Community Water System (CWS): a public water system that regularly supplies water to at least 25 year-round residents or to at least 15 service connections.
2. Non-Transient Non-Community Water System (NTNCWS): a public water system that is not a community water system and that regularly supplies water to at least 25 of the same people at least six months per year. Some examples are schools, factories, office buildings, and hospitals which have their own water systems.
3. Transient Non-Community Water System (TNCWS): a non-community water system that does not regularly serve at least 25 of the same persons over six months of the year such as a gas station or campground.

PWS sources are:

- Ground water (GW)
- Purchased ground water (GWP)
- Surface water (SW)
- Purchased surface water (SWP)
- Ground water under the influence of surface water (GU) or (GWUDI) and
- Purchased ground water under the influence of surface water (GUP)

EPA water system size classifications used in this report are:

- Small systems serve 25 to 3,300 people
- Medium systems serve 3,301 to 10,000 people
- Large systems serve more than 10,000 people

According to the Federal Safe Drinking Water Information System (SDWIS/Fed) the State of Texas has a total of **6,942 PWSs** serving **25,845,018 people**, as illustrated in the following Texas PWSs Population Table.

Texas FY 2011 PWS Population Table

July 1, 2010 through June 30, 2011 SDWIS/Fed quarterly data

PWS Type	GU		GUP		GW		GWP		SW		SWP		TOTAL	
	SYS	POP	SYS	POP	SYS	POP	SYS	POP	SYS	POP	SYS	POP	SYS	POP
CWS	19	12,652	-	-	3,293	5,203,734	203	370,273	307	10,951,485	892	8,523,485	4,714	25,061,629
NTNC	1	25	-	-	775	228,508	20	6,193	6	3,820	93	271,146	895	509,692
TNC	7	951	-	-	1,217	230,156	36	10,085	12	9,679	61	22,826	1,333	273,697
Sum	27	13,628	-	-	5,285	5,662,398	259	386,551	325	10,964,984	1,046	8,817,457	6,942	25,845,018

IV. TCEQ PWSS Program

IV. A. TCEQ Organization

Appendix A shows the Water Supply Division (WSD) Organization Chart and Appendix B contains the WSD Contact Table. Appendix C shows the overall TCEQ Organization Chart. The TCEQ PWSS program involves three offices and multiple divisions. The office of Water (OW) houses the WSD. The Office of Compliance and Enforcement (OCE) contains the Enforcement Division (ED), the Field Operations Division (FOD), and the Field Operations Support Division (FOSD). The Office of Waste (OW) now houses the Permitting & Registration Support Division (PRSD) where the operator certification program is currently located.

Background: Prior to, and immediately after, federal promulgation of the SDWA, PWSS Program responsibility resided with the Texas Department Health. In 1990, the program was transferred to the Texas Water Commission, which was reorganized into the Texas Natural Resource Conservation Commission (TNRCC) in 1992. In 2003, the TNRCC was renamed the TCEQ.

IV. B. TCEQ PWSS Program Responsibility Areas

Water Supply Division (OW/WSD)

The WSD is responsible for programs that ensure the efficient administration of surface water use; the production, treatment, delivery and protection of safe and adequate drinking water; and the provision of dependable, viable utility service at fair levels of compensation. The division performs the following functions:

- Oversees the production, treatment, quality and delivery of drinking water for the public by implementation of the Safe Drinking Water Act
- Assesses and protects sources of public drinking water
- Offers technical assistance on the design and operation of public water systems
- Guides public water systems on homeland-security preparation, response, and recovery
- Reviews applications for rate changes, certificates of convenience and necessity, utility sales, district creation, and district bond issues
- Reviews engineering plans for new or significantly modified public water systems or exceptions to TCEQ rules
- Assesses the financial, managerial, and technical capabilities of public water systems
- Manages the Water Utilities Database and the Water Availability Modeling Database

Public Drinking Water Section (OW/WSD/PDWS)

The Public Drinking Water Section (PDWS) has responsibility for data deliverables, report deliverables, and many of the PWSS Program elements in order to:

- Manage disbursement of the PWSS Program Performance Partnership Grant
- Provide inventory, grant-withholding, and action data deliverables to EPA R6
- Provide the QAPP, Annual Compliance Report and other report deliverables to EPA R6

- Write, adopt and implement rules at least as stringent as the federal rules (Texas Administrative Code (TAC) Chapter 290)
- Provide compliance and technical assistance to PWSs
- Ensure initial water quality meets minimum standards before approving a new source
- Assess the source water susceptibility of all drinking water sources in the state
- Support protection of those source waters, support programs for capacity development by reviewing intended use plans
- Oversee security requirements connected with Homeland Security requirements for PWSs
- Provide support to the PWS operators licensing program by providing input on manuals and training
- Support the laboratory accreditation program as needed
- Support the Field Operations Support Division and the TCEQ Area & Regional Offices with technical assistance
- Refer PWSs that exceed compliance trigger levels agreed upon by the TCEQ and the EPA to the Enforcement Division
- Reviews CCI and inspection information for adherence to Data Quality Standards and completeness

Plan Section (WSD/OW/PS)

The Plan & Groundwater Section (PGRS) manages and implements major programmatic responsibilities:

- Manage disbursement of Drinking Water State Revolving Funds (DWSRF or SRF)
- Coordinate use of those SRF funds with Texas Water Development Board
- Implement the Capacity Development program by ensuring that PWSs receive financial, managerial, and technical assistance
- Review and approval of plans and specifications for PWSs and to refer plans for innovative treatment to the PDWS
- Ensure and track compliance monitoring and compliance determination for chemical and microbiological standards and the Surface Water Treatment Rule (SWTR)
- Review and approve engineered plans for innovative water treatment, develop consistent policy for these activities, and document exceptions to the state design rules
- Maintain records and data for these programs

TCEQ Area & Regional Offices (OCE/Border and South Central Texas Area; OCE/Coastal and East Texas Area; OCE/North Central and West Texas Area)

The TCEQ Area & Regional Offices have the responsibility for performing sanitary surveys (otherwise known as Texas Comprehensive Compliance Investigations). The Region's tasks include:

- Perform Sanitary Surveys (SS) every three years for community water systems and every five years for non-community water systems
- Report inventory data to the Public Drinking Water Section on the PWS Data Sheet, or as determined by TCEQ Information Technology

- Report violations of the TCEQ's rules and regulations (30 TAC 290 Subchapter D) to the Enforcement Division and appropriate water supply entity
- Report violations of the TCEQ's drinking water standards (30 TAC 290 Subchapter F and H) to the PDWS as areas of concern on the CCI report
- Report the number of CCLs completed to the OCE Field Operations Support Division (OCE/FOSD)

Field Operations Support Division (OCE/FOSD)

The Field Operations Support Division (FOSD) has responsibility of providing support to the TCEQ Area & Regional Offices and participates in many of the PWSS Program elements:

- Rule changes to Texas Administrative Code (TAC) Chapter 290
- Assist the regions and the PDWS
- Convey information to and from the PDWS and the Regional Offices
- Prepare staff guidance, standard operating procedures and training for regional staff to ensure consistency within regions and with PDWS
- Laboratory accreditation program

Occupational Licensing Section (Office of Waste /PRSD/OLS)

The Occupational Licensing Section's Water Operator Licensing Program ensures that trained personnel will be available to PWSs. Their PWSS Program responsibilities include:

- License operators for community and non-transient non-community PWSs
- Maintain records of licensed operators including the level and type of license

V. Privacy Review

V. A. Privacy Requirements

TCEQ continues to meet the federal primacy requirements listed in Appendix D. The SDWA includes a requirement that EPA establish and enforce such standards as maximum contaminant levels (MCL), treatment techniques, and the monitoring that PWSs must adhere to. Texas is required to maintain a PWSS program in order to retain primary enforcement authority (primacy) over Texas PWSs compliance with the Safe Drinking Water Act (SDWA). The PWSS federal requirements are documented in the National Primary Drinking Water Regulations (NPDWR) of Title 40, Code of Federal Regulations (CFR), Chapters 141 and special primacy requirements Chapter 142. TCEQ PWSS program deliverables are summarized in the below Table.

Texas PWSS Program Deliverables Summary Table

Category	Deliverables
Data	<ul style="list-style-type: none"> - Quarterly Texas PWSs inventory and grant-withholding data - Quarterly SDWA violations, formal and informal compliance actions - Annual Compliance Report data evaluation Responses to quarterly Enforcement Tracking Tool (ETT) list,

Category	Deliverables
Reports/ Review	<ul style="list-style-type: none"> - Annual Grant Management Report - Annual Compliance Report (ACR) detailing the compliance status of Texas PWSs to EPA - Triennial QAPP - EPA Data Verification Audit as requested - Annual EPA PWSS Program Review - Annual list of labs accredited for drinking water analyses - Annual report on operator licensing and training activities - Capacity Development Reports, triennial Governor's report, and Annual Capacity Development report)
Primacy	<ul style="list-style-type: none"> - Manage and administer EPA funding - Deliver accurate and timely PWS inventory, violation, lead/copper rule milestones, site visit, and action data - Adopt rules at least as stringent as the NPDWRs - Ensure compliance monitoring and compliance determination for chemical and microbiological standards, ensure initial water quality meets minimum standards before approving a new source - Assess the source water susceptibility of drinking water sources and provide support to help public water systems protect those source waters - Review and approve engineered plans for PWS infrastructure improvements; - Support capacity development programs - Oversee compliance with and provide technical assistance for Homeland Security requirements for PWSs - Perform PWS sanitary surveys (source, treatment, distribution, storage, pump facilities, data verification, management, operation, and operator compliance) - Ensure formal enforcement action for PWSs that exceed compliance trigger levels are agreed upon by the TCEQ and the EPA - Maintain a drinking water laboratory accreditation program - Maintain a PWS operators licensing program

V. B. SDWA PWSS Program Revisions

TCEQ is seeking to prepare complete-and-final applications to achieve final primacy revision approval, incorporating five SDWA rules:

- Long Term 2 Enhanced Surface Water Treatment Rule (LT2)
- Stage 2 Disinfectants and Disinfection Byproducts Rule (DBP2)
- Public Notification Rule minor revisions (PN/MR)
- Lead and Copper Rule Short Term Revisions (LCR/STR)
- Ground Water Rule (GWR)

Texas holds primacy for the TCR, CCR, Phase II/V, LCR, SWTR, IESWTR, LT1 IESWTR, Arsenic, Stage 1 DBPR, PN, FBRR, and the Interim and Revised Radionuclides Rules. TCEQ has an extension agreement in place for LCR/STR and has interim primacy agreements in place for Stage 2 DBPR, LT2 ESWTR, and the GWR.

1) Primacy Revision Applications

TCEQ intends to submit two successive primacy revision submissions:

1. LCR/STR, DBP2, LT2, and PN/MR (Four Rule Package)
2. GWR

The final program complete-and-final primacy revision package consists of:

- Adopted Texas Regulations
- Final approved regulation Crosswalks (side-by-side State and EPA rule citation comparison)
- Texas Attorney General's Enforceability Certification

EPA has received the adopted Texas regulations and the approved final crosswalk for the LCR/STR, DBP2, LT2, and PN/MR. EPA has not received DBP2, LT2, and PN/MR Attorney General's Certification to complete the primacy review package.

Primacy Determination Background: EPA final determination includes the following:

- Regional Review (and approval)
- EPA Office of Regional Council (ORC) approval
- EPA HQ Review and approval of EPA R6 LT2, DBP2 and GWR crosswalk comments.
- Public Notice
- Opportunity for Hearing
- EPA's Final Determination

DBP2, LT2, LCR/STR and PN/MR - Four Rule Package: EPA has approved the associated crosswalks by confirming that the citations are equivalent to the federal language. TCEQ is implementing the LT2, ST2, LCR/STR and PN/MR according to the Federal requirements until final primacy is achieved. TCEQ additionally has LT2, ST2, and PN/MR interim enforcement authority pursuant to 40 CFR 142.13 (e). TCEQ needs to provide AG certification to complete the final primacy package for Public Notice, any necessary opportunity for hearing, and EPA's final determination.

GWR: TCEQ is preparing the GWR final primacy revision package. TCEQ intends to implement the GWR according to the Federal requirements in the interim. TCEQ has GWR interim enforcement authority pursuant to 40 CFR 142.12 (e). TCEQ therefore can continue to perform compliance determination including public notification violations and sanitary survey significant deficiencies for enforcement without referring to EPA.

Variance and Exemptions (V&E) Regulations: V&E was adopted by TCEQ in October, 2005. The latest V&E crosswalk was created by direct reference to the federal regulations. EPA received V&E AG Certification on May 5, 2008. TCEQ is not currently using the V&E

program. If TCEQ does decide to use V&E in the future, the intent is to employ the direct references to the CFR.

2) Approved Primacy Revisions

As shown in Appendix E- TCEQ primacy Table – Texas achieved final primacy approval on December 29, 2006, in accordance with 40 CFR §142.13, for three rules:

- Lead and Copper Rule Minor Revisions (LCRMR)
- Filter Backwash Recycling Rule (FBRR)
- Long Term 1 Enhanced Surface Water Treatment Rule (LT1)

TCEQ similarly received final primacy approval for:

- Two rules in September, 2005:
 - Arsenic Rule
 - Radionuclides Rule
- Three rules in August, 2001:
 - Consumer Confidence Report Rule (CCR)
 - Interim Enhanced Surface Water Treatment Rule (IESWTR)
 - Stage 1 Disinfectants and Disinfection Byproducts Rule (Stage 1 DBPR)
- And two SDWA statutory requirements in August, 2001:
 - Administrative Penalty Authority
 - New Definition for Public Water System

III. C. Drinking Water Rules Implementation

Appendix F shows EPA's drinking water Performance Activity Measures (PAMs). Appendix H shows the Texas top 50 water systems in violation by population. And lastly, the PWS violation tables are shown in Appendix I and J. Appendix I shows the Texas FY 2011 Number of Systems with Violations Table and Appendix J shows the Number of Total Violations Table.

TCEQ achieved PAMs results that exceed the targets illustrated in Appendix F. One of the drinking water measures reflecting public health improvements is 2.1.1 - Water Safe to Drink: The EPA Region 6 FY 2011 2.1.1 goal is 87%. The Texas 2.1.1 rate achieved is 91.7%, higher than the EPA goal. EPA commends TCEQ for Texas water system performance above and beyond the PAMs expectations.

1) Chemical Monitoring

Compliance Agreements: the TCEQ inorganic contaminant (IOC) and Radionuclide (Rad) violations primary enforcement action have been Compliance Agreements (CA). TCEQ CAs (also referred to as Bilateral Compliance Agreements) have enforceable three year end dates, except for Fluoride violations that have a five year closing date. TCEQ began implementing the

National Enforcement Response Plan (ERP) in May 2011. TCEQ thereafter ceased issuing CAs as directed by EPA and EPA began issuing federal enforcement orders (reference the EPA FY 2011 TCEQ Enforcement Program Review Report for more details).

a) Inorganic Contaminants (IOCs)

Texas IOC violations are illustrated in the Table below.

Texas FY 2007 to FY 2009 IOC MCL Violation Table

Summarizing FY 2011 SDWIS/Fed quarterly data

Contaminant	FY 2009 PWSs	FY 2009 Violations	FY 2010 PWSs	FY 2010 Violations	FY 2011 PWSs	FY 2011 Violations
Arsenic	101	262	117	355	108	366
Fluoride	39	93	39	118	35	130
Nitrate	66	145	59	131	62	151
IOC Total	206	500	215	604	205	647

Arsenic: The new arsenic MCL of 10 parts per billion (ppb) became effective on February 22, 2002. The date by which systems must comply with the new 10 ppb standard was January 23, 2006. When a Texas PWS exceeds the Arsenic MCL, TCEQ requires quarterly public notices. To resolve the violation, PWS must seek either treatment methods or alternative water sources. Feasibility Studies are required as part of the CA to investigate the available options and determine the costs (capital and operation-and-maintenance). TCEQ can provide financial assistance through a contractor (i.e. TRWA) or the PWS can hire a consultant. The non-treatment options include either 1) obtain a new source, or 2) isolate the low arsenic well water level. The arsenic treatment options include:

- Removal and blending
- Adsorption medias (Ferric Oxide & Activated Alumina)
- Ion Exchange
- Hybrid-Ion Exchange/Adsorption Media
- Precipitation and filtration
- Reverse Osmosis
- Point-of-use/point-of-entry (POU / POE)

Typical Funding Options include:

- Drinking Water State Revolving Fund (DWSRF)
- Rural Development (USDA)
- Rate Increase
- TWDB special funding

Nitrate / Nitrite: TCEQ requires systems to sample for nitrate annually. TCEQ is requiring nitrite quarterly repeat sampling for systems with initial monitoring results greater than one-half

the 10 mg/L MCL. Such monitoring is at the discretion of the State. TCEQ is also requiring systems with initial monitoring results greater than or equal to the MCL to perform quarterly nitrites sampling, which can only be reduced to annual sampling after four consecutive quarterly samples below the MCL.

Fluoride: EPA set the enforceable maximum drinking water fluoride MCL of 4 mg/L. Fluoride has a secondary standard of 2 mg/L to protect against dental fluorosis in children. Fluoride can occur naturally in water. Many Texas communities add fluoride to their drinking water to promote dental health. Texas communities can determine whether or not to add fluoride. Four treatment methods are suitable for removing fluoride from drinking water, including:

- Activated alumina filters
- Distillation
- Reverse osmosis
- Anion exchange
- POU / POE

Texas violators of either the fluoride MCL or secondary standard are required to produce a feasibility study under a CA, provide good water to children, sample quarterly or annually, and provide public notification quarterly or annually. A PWS with a secondary fluoride violation only has to be sampled annually and send a resulting public notice annually.

b) Radionuclide (Rad)

The revised Rads Rule came into effect on December 8, 2003. Regulated Rads include Combined Radium (radium-226 and radium-228), Gross Alpha particle activity, Combined Uranium (U), and beta particle and photon radioactivity. No Texas systems have been found to be vulnerable to beta particle contamination and thus are not required to monitor for beta radioactivity.

TCEQ reportedly discontinued laboratory error-margin-subtraction, including for Rads, beginning January 1, 2009. As shown in the following Rads Violation Table, there were **71** FY 2011 Systems with Rads violations.

Texas FY 2009 to FY 2011 Rads Violation Table

Summarizing FY 2011 SDWIS/Fed quarterly data

Contaminant	FY 2009 PWSs	FY 2009 Violations	FY 2010 PWSs	FY 2010 Violations	FY 2011 PWSs	FY 2011 Violations
Combined Radium	30	26	32	51	27	52
Gross Alpha	24	21	30	47	27	41
U	11	11	9	15	7	10
Rad Total	65	55	71	113	61	103

d) Phase II/V Rule

Synthetic Organic Chemicals (SOC): As shown in Appendix I, there are no recorded FY 2011 Texas PWSs that have SOC MCL violations.

Volatile Organic Chemicals (VOC): TCEQ is now implementing the VOC increased monitoring in accordance with the federal rule requirements. Tank coating is no longer taken into consideration as a reason to not increase a public water systems monitoring if a regulated VOC is detected.

2) Total Coliform Rule (TCR)

As shown in Appendix I, there are 117 FY 2011 Texas PWSs that have 123 TCR MCL violations. TCR MCL population based violations continue to be a large portion of the total. As derived from Appendix H, approximately *44% of those “Texas top 50 systems in violation by population” are due to TCR violations.

*44% = 634,742 (TCR MCL violation population affected) / 1,456,709 (Sum of top 50 system’s population) × 100(%).

3) Ground Water Rule (GWR):

Texas Ground water systems began compliance with the GWR by the December 1, 2009 closing date. Ground water systems will either be 1) treating their water to at least 4-log virus removal/inactivation as approved by the State or 2) conducting compliance monitoring, or conduct triggered source water monitoring for the presence of a fecal indicator (i.e., E. coli for Texas) in response to positive sample results from monitoring under the Total Coliform Rule (TCR). In addition, the GWR now provides consistency with Subpart H systems for sanitary surveys. All community and non-community ground water systems will be on a 3 and 5 year survey cycles, and all ground water systems will be surveyed for the same eight elements identified for Subpart H water systems. Corrective action is required for ground water systems, as directed by the TCEQ, for positive source water sample results or significant deficiencies.

4) Lead/Copper Rule (LCR)

TCEQ provides technical assistance to systems with lead or copper Action Level Exceedances (ALE). Technical assistance is generally provided by the TRWA contractors. TCEQ downloads LCR sample data once a week from the LCRA-ELS laboratory. In 2011, TCEQ continued to contract with LCRA to complete LCR analysis. As shown in Appendix J, there were 27 Texas systems with FY 2011 LCR MCL violations.

5) Filter Backwash Recycling Rule (FBRR)

Under the FBRR, Texas water systems that use surface water or groundwater under the direct influence of surface water (GUI), practice conventional or direct filtration, and recycle spent filter backwash, thickener supernatant, or liquids from dewatering processes must complete and submit the TCEQ Water Treatment Plant Recycling Practices Report (RPR), providing the required recycle notification. There are over 450 surface water plants in Texas that are subject to the FBRR. New Texas drinking water treatment plants are required to recycle at the beginning of treatment. FBRR records (required to be kept on file at the system) are reviewed by the FOD investigators during CCIs.

6) Consumer Confidence Report Rule (CCR)

CWSs must submit to TCEQ: 1) a copy of the CCR by July 1st annually, and 2) within three months of the required CCR delivery date, a certification that the CCR was correctly distributed. As illustrated in Appendix I & J, there are currently 458 systems with 1606 CCR violations in Texas.

TCEQ intends to continue the contractual interagency agreement with the Texas Engineering Extension System (TEEX) to utilize UT Arlington students to review CCRs and perform CCR sorting, data entry, and data verification.

7) Surface Water Treatment Rule (SWTR)

Texas requires surface-water systems to filter. There are currently no known/reported uncovered finished water reservoirs in Texas.

8) Interim Enhanced Surface Water Treatment Rule (IESWTR) and Long Term 1 Enhanced Surface Water Treatment Rule (LT1)

Surface water systems or systems classified as groundwater under the influence of surface water (GUI), serving 10,000 or more people are required to comply with IESWTR provisions (e.g., turbidity standards, individual filter monitoring) as of January 1, 2002. Based on IESWTR individual filter monitoring requirements, TCEQ arranges for a mandatory Comprehensive Performance Evaluation (mCPE). Specifically, systems must conduct a CPE if any individual filter has a measured turbidity level of greater than 2.0 NTU in two consecutive measurements taken 15 minutes apart in two consecutive months.

In FY 2011, Texas water systems continued to receive technical assistance through TCEQ's Special Performance Evaluation (SPE) program; a formal process for data verification. TCEQ also targets systems for assistance through TCEQ's Texas Optimization Program (TOP).

9) Sanitary Surveys

The FY 2011 Texas SDW-1a Sanitary Survey measure is reported as 92%, as shown in Appendix G. SDW1a is currently derived from SDWIS-Fed each year in July. The FY 2011 measure is for the three calendar year period of 2008, 2009, and 2010. SDW-1a is defined as “Percent of CWSs that have undergone a sanitary survey within three years of their last sanitary survey as required under the Interim Enhanced and Long-Term 1 Surface water Treatment Rules.”

The FOD goal is to complete CCIs every three years for CWSs and every five years for NCWSs. Approximately 60 inspectors in the FOD conduct CCIs. TCEQ continues to use an Enforcement Initiation Criteria category system. Category “A” violations rate automatic enforcement activities; Category “B” violations rate enforcement if a system has two deficiencies in a five year period; and Category “C” violations trigger enforcement if a system has three deficiencies in a five year period. Depending on the severity of the deficiency, systems have a range of response times. The most critical deficiencies must be corrected within 24-hours and the least critical must be corrected within 180 days, unless some sort of approval (i.e., for construction) is involved.

10) Stage 1 Disinfectants and Disinfection Byproducts Rule (DBP1)

DBP1 PWS MCL violations are shown in the below table. There are more than 5600 DBP1 affected systems. The primary DBP1 enforcement actions are:

- Administrative Orders (AO) for wholesale (seller) water systems and
- CAs for consecutive (purchaser) water systems - however in early CY 2011 TCEQ stopped issuing CAs as directed by EPA.

DBP1 Violation Table

Summarizing FY 2011 SDWIS/Fed quarterly data

Contaminant	FY 2009 PWSs	FY 2009 Violations	FY 2010 PWSs	FY 2010 Violations	FY 2011 PWSs	FY 2011 Violations
TTHM	110	212	90	211	75	181
HAA5	34	65	31	57	13	33
DBP1 Total	144	277	121	268	88	214

11) Stage 2 Disinfectants and Disinfection Byproducts Rule (DBP2)

Background: DBP2 provides Texas public drinking water customers more equitable (locational) protection from the risks of disinfection byproducts. Its provisions include a one-year period of increased early implementation sampling called the Initial Distribution System Evaluation (IDSE) that was used to select new compliance monitoring sites; new compliance determination methods; operational evaluation level reporting; increased detail for currently required monitoring plans; and updated analytical methods.

TCEQ completed DBP2 Early Implementation (EI). Texas water systems on Schedules 1-4 have completed their IDSE monitoring and have completed sampling reports. EPA commends TCEQ for good DBP2 EI performance.

12) Long Term 2 Enhanced Surface Water Treatment Rule (LT2)

Background: the goal of the new LT2 is to reduce the risk of disease caused by *Cryptosporidium* and other microorganisms by identifying the systems with the greatest potential for source water contamination. LT2 provides increased protection from the protozoan *Cryptosporidium* found in surface water. Its provisions include a special period of increased early implementation sampling to determine the concentration of *Cryptosporidium* oocysts in source water, new required treatment levels for *Cryptosporidium* removal determined on a plant-by-plant basis, defined technologies for *Cryptosporidium* removal called the microbial toolbox, and updated analytical methods.

TCEQ Sampling Requirements: Unless Texas water systems have submitted grandfathered data, are providing full treatment, or are sampling for *Cryptosporidium*, beginning October 2008, these systems were required to begin sampling every surface water or GUI source as follows:

- Sample for *E. coli* every 2 weeks for a year (a total of 26 sampling events).
- In each of these sampling events, *E. coli* must be enumerated. In other words, colonies must be counted; “presence/absence” results are not sufficient.
- All *E. coli* samples must be analyzed by a TCEQ-accredited laboratory.

Texas systems (Schedules 1, 2, and 3) have reported their Bin determinations as of December 2010. Texas PWSs that exceed the *E. coli* benchmark are required to monitor for *Cryptosporidium* as required under LT 2. The *E. coli* trigger level for *Cryptosporidium* is an average 100 *E. coli* colonies/100mL for lakes, reservoirs, and flowing streams. EPA commends TCEQ for effective LT2 performance.

EPA agreed to provide TCEQ LT2 early implementation (EI) assistance, including after TCEQ obtains final primacy. TCEQ is responsible for reviewing LT2 information submitted by Schedule 4 systems where EPA is responsible for reviewing LT2 information submitted by Schedules 1, 2 and 3 water systems including:

- Letters of intent
- Standard monitoring plans
- Source water monitoring plans

13) Lab Accreditation Program

The authority to create a laboratory accreditation program in Texas has been established by Texas Water Code, Chapter 5, Subchapter R. Until July 1, 2011, Texas lab accreditation is based on an environmental testing laboratory's conformance to NELAC standards. After June 30, 2011, Texas accreditation will be based on an environmental testing laboratory's conformance to TCEQ FY 2011 PWSS Program Review Report

the most current standards adopted by the National Environmental Laboratory Accreditation Program. Accredited Texas laboratories are available on the following web address:
http://www.tceq.texas.gov/assets/public/compliance/compliance_support/qa/txnelap_lab_list.pdf

III. D. Data Management

FY 2011 timeliness and completeness of Texas SDWA data submitted to the federal Safe Drinking Water Information System (SDWIS-FED) has improved over the FY 2010 results. TCEQ has submitted complete and timely data to SDWIS-FED for the last six quarterly updates. Notably, Texas has corrected a data reporting problem to achieve the FY 2011 national sanitary survey performance measure.

Additionally, TCEQ has continued to direct resources toward the installation, testing, and production of SDWIS-Texas and its compliance modules. EPA commends TCEQ for continuing to commit resources, including additional FTE support as needed, to improve public drinking water federal reporting timeliness, completeness, and the accuracy of compliance determinations and inventory data.

TCEQ and EPA continue to agree that SDWIS-Texas data management is necessary to achieve timely enforcement and data reporting that has been an area of concern for several years. TCEQ has succeeded in adding SDWA availability through production of SDWIS-Texas Drinking Water Watch in FY 2011.

TCEQ WSD will continue to use, as primary enterprise databases, 1) the Safe Drinking Water Information Systems (SDWIS) /State for SDWA implementation, PWS inventory, and compliance determination, and sanitary surveys and 2) the Consolidated Compliance and Enforcement Data System (CCEDS) for enforcement and detailed information relating to sanitary surveys.

VI. 1996 SDWA Amendments Initiatives

VI. A. Source Water Protection (SWP)

TCEQ did not achieve the FY 2011 Source Water Protection Performance Measures SP 4(a) and (b) illustrated in Appendix G and summarized in the below table.

FY 2011 SWP Performance Measure Table

Strategic Targets	EPA Target	TCEQ Results
SP 4(a)	36%	33%
SP 4(b)	60%	57%

TCEQ should raise implementation efforts to increase the number of Texas community water systems and population served where risk to public health is minimized through source water protection.

EPA's goal is to increase the number of CWSs with minimized risk to public health through development and implementation of protection strategies for source water areas (as counted by TCEQ) from a baseline of 20% of all areas in FY 2005 to 36% in FY 2011 (see measure SP-4a). EPA also has a goal of maintaining the percent of the population served by these community water systems at 60% in FY 2011 (see measure SP-4b).

TCEQ offers PWS support to identify and implement measures that will protect their sources of water. Texas Source Water Protection is a voluntary program that helps PWSs to protect their drinking water. Locally controlled and implemented, a Texas SWP program is designed to protect drinking water sources from potential sources of contamination.

TCEQ has a new FY 2011 three year SWP assistance contract with PBS&J to conduct provide SWP project assistance to 20 CWSs annually. Additionally, TRWA continues to assist TCEQ with SWP plans under a TCEQ contract. The TCEQ SWP program utilizes a GIS Server to access topographic data. As a result of the Texas SWAP program, TCEQ established and maintains a database of potential threats to contamination of public drinking water supplies. This database plays a role in assisting TCEQ to integrate its SWP program activities with other State and EPA programs.

In FY 2011, EPA continued to support state and local efforts to identify and address current and potential sources of drinking water contamination. These efforts are integral to the sustainable infrastructure effort, because source water protection can reduce the need for expensive drinking water treatment, along with related increased energy use and costs, which, in turn, can reduce the cost of infrastructure. In FY 2011, the Agency continued to:

- Work with national, state, and local stakeholder organizations and the multi-partner Source Water Collaborative to encourage broad-based efforts directed at encouraging actions at the state and local level to address sources of contamination identified in source water assessments.
- Support source water protection efforts by providing training, technical assistance, and technology transfer capabilities to states and localities, and facilitating the adoption of Geographic Information System (GIS) databases to support local decision-making.
- Work with states, tribes, and other stakeholders to characterize current and future pressures on water availability, variability and sustainability (WAVS) in the face of climate change.

EPA will also continue working with federal programs to align source water preservation and protection with their priorities. In particular, EPA is working to integrate source water protection into Clean Water Act programs like the watershed approach and storm water management. State water quality standards set the benchmarks for surface water quality under the Clean Water Act and minimum instream flow regimes that protect aquatic habitats and will also preserve surface

water and ground water supplies for all uses. States, tribes, and communities should review these standards and regimes to make sure their source waters will be preserved and protected.

EPA will additionally continue working with other federal agencies like the U.S. Forest Service to maintain healthy land cover and the U.S. Department of Agriculture on land conservation programs and best management practices to protect water quality. EPA encourages states and communities to leverage these programs to preserve and protect drinking water supplies.

VI. B. Capacity Development

TCEQ provided the Texas FY 2011 Capacity Development program status by submitting the Texas Public Water System Capacity Development Triennial Report to the Governor to EPA on September 19, 2011. This report provided information that addresses the SDWA capacity development withholding provisions. EPA determined that the report's content demonstrates that TCEQ is implementing a strategy to assist public water systems in acquiring and maintaining technical, managerial, and financial capacity. Region 6 is satisfied with the progress of TCEQ's Capacity Development program. EPA will request that TCEQ submit to EPA the Texas Capacity Development Annual Implementation Report next fall, 2012, for future FY 2013 DWSRF application processing.

Section 1420(a) of the SDWA requires States to develop legal authority or other means to ensure that new CWSs and new NTNC water systems have financial, managerial, and technical (FMT) capacity with respect to each National Primary Drinking Water Regulation. Section 1452(a)(1)(G)(i) requires EPA to withhold 20% of a State's DWSRF capitalization grant unless the State meets the capacity authority requirements under Section 1420(a).

VI. C. EPA Drinking Water Grants

1) PWSS grant (PPG)

The TCEQ FY2011 PWSS allotment was \$6,589,000 (the FY 2010 allotment was \$6,599,000):

- On 12/14/10 EPA awarded \$1,157,085 in FY 2011 funds
- On 4/5/11 EPA awarded \$2,142,415 in FY 2011 funds
- On 8/16/11 EPA awarded \$2,560,712 in FY 2011 funds
- The balance of \$728,788 in FY 2011 funds (not applied for) is in a Funding Recommendation to "forward fund" FY 2012 work

TCEQ applied for \$6,310,279 in FY 2010 and \$6,148,933 in FY 2011, for a total 2 year application amount of \$12,459,212. Total funds awarded in FY 2010 and FY 2011 combined was \$12,459,212.

The 2012 PWSS allocation was unknown at the time of the Program Review, since EPA did not have an FY 2012 operating budget. EPA will notify the State once a budget is established. EPA expects to award some level of State funding during the first quarter of FY 2012.

2) DWSRF Set-asides – Unliquidated Obligations (ULOs) – as of 8/09/11

Grant Number	ULO	Technical Assistance (2%)	State Programs Management (10%)
FS99679513 (FY 2009)	\$524,136	\$524,136	0
FS99679514 (FY 2010)	\$6,485,523	\$1,725,080	\$4,760,443
TOTAL	\$7,009,659	\$2,249,216	\$4,760,443

The FY 2010 grant was not awarded until the end of FY 2010. ULOs continue to be an issue, due to the federal budget, therefore TCEQ is encouraged to draw down funds for expenses in a timely manner.

3) ERG Grant and Homeland Security Grant

Texas has drawn down the balances on these grants. The grants are now closed.

4) Quality Assurance Requirements

- a. QMP: expires 1/03/2012
- b. QAPP: expires 11/9/2013

Quality Assurance (QA) plans are due in to EPA at least 30 days prior to expiration of the previously approved plan, to allow for review and approval. Quality Assurance Project Plans (QAPP) can be approved for up to 4 years. The latest QAPP was approved for 2 years.

5) DWSRF Grant Summary

Fiscal Year	Grant	Loan Portion	TCEQ 10%	SWP 15%	TCEQ 2% SS	TWDB 4%
2005	\$63,818,500	\$53,694,240	\$6,381,850	\$0	\$1,276,370	\$2,466,040
2006	\$67,799,500	\$57,429,348	\$6,381,850	\$0	\$1,276,370	\$2,711,982
2007	\$67,801,000	\$55,985,268	\$6,779,955	\$0	\$1,200,000	\$3,835,777
2008	\$67,112,000	\$54,596,522	\$6,711,200	\$0	\$1,342,240	\$4,407,151
2009	\$67,112,000	\$56,374,080	\$6,711,200	\$0	\$1,342,240	\$2,684,480
2010	\$86,254,000	\$72,453,360	\$8,625,400	\$0	\$1,725,080	\$3,450,160

Available to apply for:

2011	\$59,854,000	\$41,299,260	\$5,985,400	\$8,978,100	\$1,197,080	\$2,394,160
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6) Needs Survey

TCEQ has kept up with EPA targets achieving 100% Texas needs survey submittal prior to the December 23, 2011 closing date.

EPA uses the Drinking Water Infrastructure Needs Survey and Assessment (DWINSA or Needs Survey) results to allocate DWSRF funds to the States and Tribes as required by the SDWA. The State DWINSA is conducted every four years. A Tribal Needs Survey was conducted 12 years ago in 1999. EPA is conducting a new Tribal Needs Survey in 2011.

The Needs Survey statistical inventory includes CWS and not-for-profit non-community water systems. Projects must be DWSRF eligible and meet specific documentation requirements. The 2007 Survey data is used to determine the FY 2010 to FY 2013 DWSRF allocation allotments. The 2011 Survey will determine the allotments for four fiscal years starting with FY 2014.

The Texas DWINSA reported 20-year need (in millions of January 2007 dollars) was 33,730 in 2003 and 26,131 in 2007. This is a 22.5 % drop in estimated need. Projects qualify if they are designed for “reasonable growth”. Projects do not qualify if the sole purpose is interpreted as growth.

Key 2011 DWINSA changes (compared to the 2007 survey) include:

- More rigorous infrastructure replacement documentation requirements to “level” the individual State results
- State Small Systems (serving 3,000 and fewer persons) will not be surveyed directly but will be estimated from the 2007 Survey
- Incorporation of Green Projects and Climate Change projects (if associated with an otherwise qualifying project)

VI. D. Operator Certification

EPA received the FY 2011 Annual Operator Licensing Certification Report from TCEQ on September 30, 2011. This annual report documents how TCEQ is implementing its Operator Certification Program to meet the EPA requirements described in the Guideline for the Certification and Recertification of CWS and NTNC PWS operators, dated February, 1999. EPA has determined that TCEQ is implementing the Texas Operator Certification Program in accordance with the requirements of the Guidelines. The FY 2012 TCEQ Operator Certification annual report is due to EPA by September 1, 2012. Further information on TCEQ water operator licensing requirements is available on the following web-address:

<http://www.tceq.texas.gov/licensing/licenses/waterlic/>

VI. E. Unregulated Contaminant Monitoring Rule – Cycle 3 (UCMR3)

The proposed third Unregulated Contaminant Monitoring Regulation (UCMR 3) was published in the Federal Register on March 3, 2011. Together EPA, the States, laboratories, and public water systems (PWSs) are engaged at various levels with key roles in UCMR 3.

UCMR 3 Proposal Highlights: Sampling is anticipated during 2013-2015. The proposed monitoring includes two viruses and 28 unregulated chemical contaminants. Monitoring for the viruses would be the first Pre-Screen Testing (List 3) within UCMR.

All PWSs serving more than 10,000 people and a representative sample of 800 PWSs serving 10,000 or fewer people are required to conduct Assessment Monitoring (List 1) for 28 chemicals during a 12-month period between January 2013 through December 2015. Nationally, 800 selected PWSs serving 1,000 or fewer people are required to conduct Pre-Screen Testing (List 3) for two viruses during a 12-month period during January 2013 through December 2015.

<http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/methods.cfm>

The goal of the UCMR under the SDWA is to obtain reliable data concerning the occurrence of unregulated contaminants in drinking water as one of the key steps in the EPA's determination of whether or not to regulate them. Since the EPA and the States and Tribes are partners in the implementation of any future regulations associated with these contaminants, we have a joint and mutual interest in obtaining the best data possible through the UCMR monitoring program.

TCEQ UCMR3 Partnership Agreement: TCEQ has the opportunity to assist EPA with certain aspects of UCMR implementation. TCEQ has agreed to support the UCMR3 implementation through a Partnership Agreement by assisting with the below activities:

1. Review the draft State Monitoring Plan (SMP) to verify proper classification of public water systems (PWSs). The SMP is a comprehensive list of water systems, including: 1) all large PWSs (serving >10,000 persons), and EPA-selected small PWSs (serving <10,001 persons) that must conduct Assessment Monitoring; 2) all EPA-selected small PWSs that must conduct the Pre-Screen Testing; and possibly 3) all very large PWSs and EPA-selected small and large PWSs that must conduct Screening Surveys. The SMP must be returned to EPA's Technical Support Center (TSC) within 75 days of receipt of the draft SMP.
2. Provide (or confirm) the proper PWS inventory data (PWSID, facility ID and sample point ID) for each PWS to use for reporting their monitoring data in the Safe Drinking Water Accession and Review System (SDWARS). This may include initially providing the complete inventory and correcting or adding facilities and/or sample points, when necessary. The inventory list must be returned to the TSC within 90 days of receipt of the draft SMP.

VII. Other Initiatives

VII. A. Staffing

TCEQ employs multiple contracts through State universities, agencies, and outside contractors to perform projects from sampling to technical assistance. To compensate for the continuing TCEQ FTE cap, TCEQ outsources PWSS program activities through Texas State University (TSU) interns and an inter-local agreement with the Texas Engineering Extension System (TEEX), a member of the Texas A&M University System.

Under the TCEQ Capacity Development program - TCEQ applies a DWSRF 2% small system technical assistance contract with UT Bureau of Economic Geology (UTBEG) to perform

technical-assistance / FMT-capacity-assessments and uses an FMT Texas Rural Water Association (TRWA) contract that provides small system technical assistance site visits. TCEQ additionally has a Delta Consultants sample collection contract for Texas PWS chemical sampling.

VII. B. Texas Optimization Program (TOP)

The TOP FY 2011 work plan deliverables are shown in Appendix K. The TOP is designed to improve the performance of existing surface water treatment plants without major capital improvements. To produce the safest water possible, water systems evaluate performance and identify the factors that might be limiting plant performance. The evaluation technique used most often by public water systems is the Comprehensive Performance Evaluation (CPE). The evaluation includes an assessment of:

- Plant design
- Operational procedures
- Maintenance practices
- Administrative policies

The TOP develops and provides instruction on surface water treatment and disinfection in the form of training modules. Quarterly, new rule and drinking water concept training are provided by the TOP to FOD and WSD. The TOP also trains FOD and WSD staff on Special Performance Evaluations.

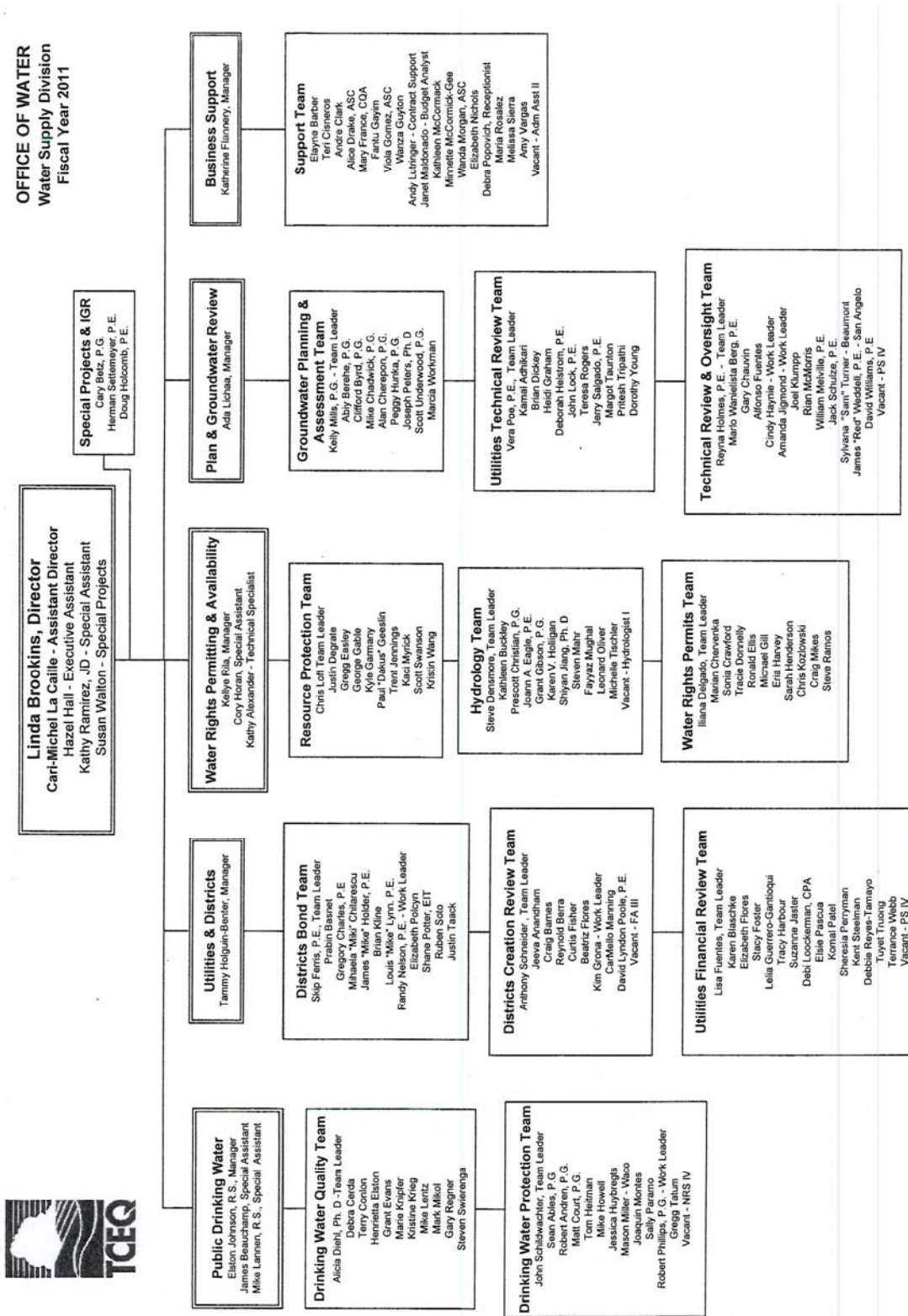
VII. C. Public Drinking Water Recognition Program

The Texas Public Drinking Water Recognition Program recognizes the effort, dedication, and contribution public water supplies make to the state and to protecting public health. Each year at the annual TCEQ Public Drinking Water (PDW) Conference, water systems in Texas are recognized for their outstanding performance for the preceding calendar year for these categories:

- Small Water Systems Security Program
- Substantial Source Water Protection Program Implementation
- Innovative or Proactive System
- Outstanding Public Drinking Water System
- Outstanding Cross-Connection Control Program
- Total Coliform Rule Program

APPENDIX A

TCEQ Water Supply Division (WSD) Organization Chart



September 1, 2010

APPENDIX B

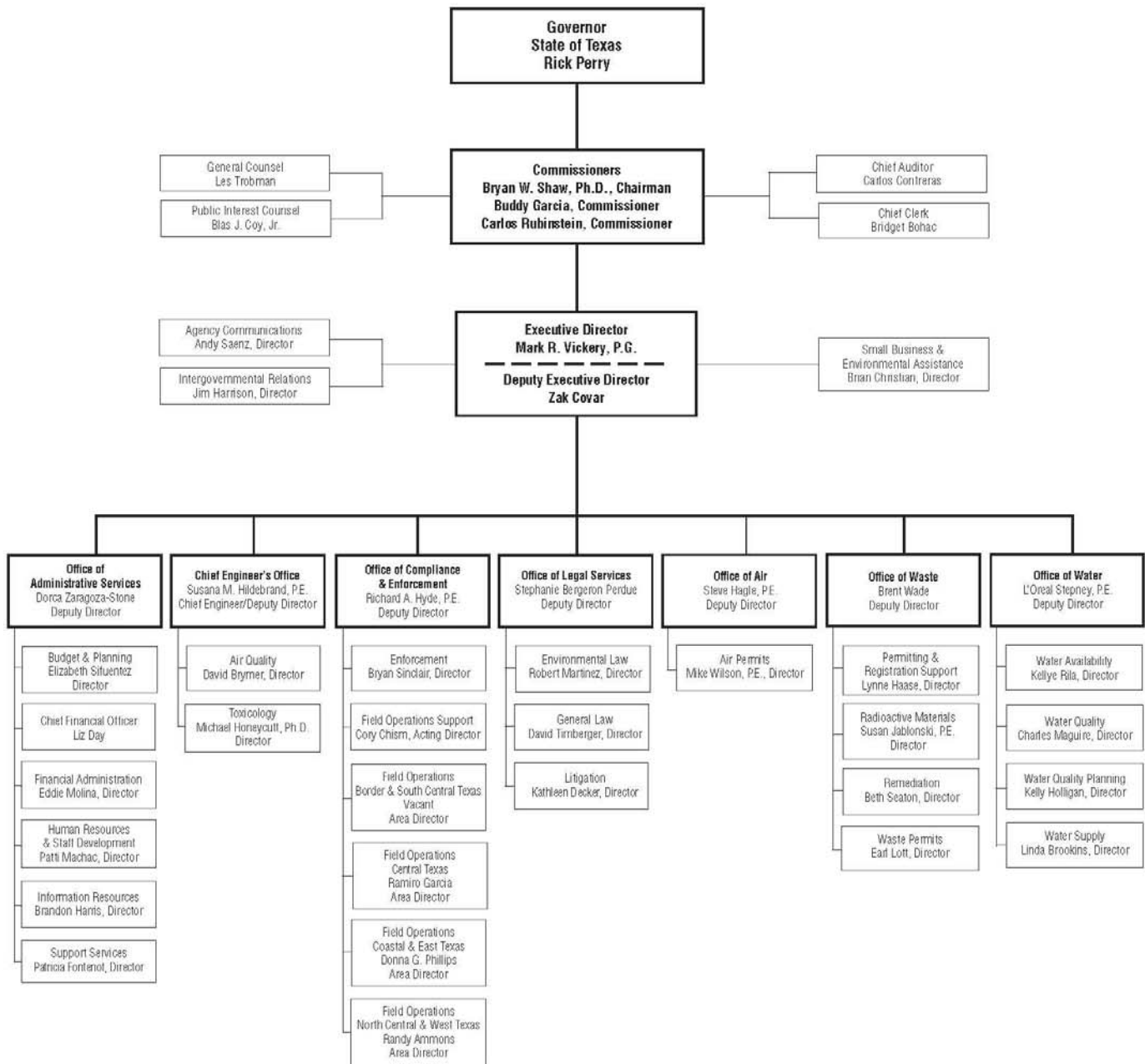
TCEQ Water Supply Division Contact Table

Water Supply Division MAIN LINE: [512]-239-4691 FAX (Reception Area): 239-2214 Consumer Assistance Hotline: 239-6100 Mailing Address: Contact Name, Mail Code, TCEQ, P.O. Box 13087, Austin, TX 78711-3087				
[512-]				
Director	Linda Brookins	MC 154	239-4625	
Assistant Director	Cari-Michel La Caille	MC 154	239-6479	
Executive Assistant	Hazel Hall	MC 154	239-4310	FAX: 239-6145
Special Projects	Susan Walton	MC 154	239-6147	
Legislative and Consumer Liaison	Doug Holcomb	MC 154	239-6947	
Public Drinking Water Section		MC 155	239-4691	
Manager	Elston Johnson	MC 155	239-6266	FAX: 239-0030
Drinking Water Protection	John Schildwachter	MC 155	239-2355	
Utilities and Districts Section		MC 153	239-4691	
Manager	Tammy Holguin-Benter	MC 154	239-6136	FAX: 239-6972
Utilities Financial Review	Lisa Fuentes	MC 153	239-6117	
Districts Bond	Tony Schneider	MC 152	239-4708	
Districts Creation Review	Sandy Van Cleave	MC 152	239-2670	FAX: 239-6190
Plan Section	MC 153	239-4691		
Manager	Ada Lichaa	MC 153	239-6728	
Utilities Technical Review	Vera Poe	MC 159	239-6988	
Technical Review and Oversight	Joel Klumpp	MC 159	239-4453	
Business Support Section	MC 157	239-4691		
Manager	Katherine Flannery	MC 157	239-6116	FAX: 239-2214
Budget Analyst	Janet Maldonado	MC 157	239-4047	
Contract Support	Andy Lutringer	MC 157	239-6179	
Administrative Assistant	Viola Gomez	MC 157	239-6173	
Administrative Assistant	Liz Nichols	MC 157	239-2529	

APPENDIX C

TCEQ ORGANIZATION

September 19, 2011



APPENDIX D

Primacy Requirements (40 CFR 142, Subpart B)

- The State must have regulations for contaminants regulated by the national primary drinking water regulations (NPDWRs) that are no less stringent than the regulations promulgated by EPA. States have up to 2 years to develop regulations after new regulations are released by EPA.
- The State must have adopted and be implementing procedures for the enforcement of State regulations.
- The State must maintain an inventory of public water systems in the State.
- The State must have a program to conduct sanitary surveys of the systems in the State.
- The State must have a program to certify laboratories that will analyze water samples required by the regulations.
- The State must have a laboratory that will serve as the State's "principal" lab, that is certified by EPA.
- The State must have a program to ensure that new, or modified, systems will be capable of complying with State primary drinking water regulations.
- The State must have adequate enforcement authority to compel water systems to comply with NPDWRs, including:
 - Authority to sue in court;
 - Right to enter and inspect water system facilities;
 - Authority to require systems to keep records and release them to the State;
 - Authority to require systems to notify the public of any system violation of the State requirements; and
 - Authority to assess civil or criminal penalties for violations of the State Primary Drinking Water Regulations and Public Notification requirements.
- The State must have adequate recordkeeping and reporting requirements.
- The State must have adequate variance and exemption requirements as stringent as EPA's, if the State chooses to allow variances or exemptions.
- The State must have an adequate plan to provide for safe drinking water in emergencies like a natural disaster.
- The State must have adopted authority to assess administrative penalties for violations of their approved primacy program
- The state must review plans and specification for new or modified water system facilities

Applicable Law, Regulations and Guidance

- Safe Drinking Water Act, 1974, as amended in 1986 and 1996
- Primacy Regulations 40CFR142, Subpart B, 1976, as amended in 1986
- State Programs Priority Guidance (1992)
- Revisions to Primacy Requirements (1998), 63 FR 23362 to be codified at 40CFR142

APPENDIX E

TCEQ Primacy Table

SDWA Rule (Deadline does not include two-year extension)	DRAFT PRIMACY REVISION APPLICATION OR PROGRAM UPDATE		STATE ADOPTION		FINAL PRIMACY REVISION APPLICATION OR PROGRAM UPDATE	
	<i>Status</i>	<i>Date</i>	<i>Status</i>	<i>Date</i>	<i>Status</i>	<i>Date</i>
New PWS Def. (Deadline: 4/28/02)	Received	1-Apr-00	Adopted	1-Feb-99	Approved	1-Aug-01
Administrative Penalty Authority (Deadline: 4/28/02)	Received	1-Apr-00	Adopted	1-Sep-97	Approved	1-Aug-01
CCR Rule (Deadline: 8/19/02)	Received	1-Aug-00	Adopted	1-Aug-00	Approved	1-Aug-01
IESWTR (Deadline: 12/16/02)	Received	1-Mar-00	Adopted	1-Sep-00	Approved	1-Aug-01
DBPR (Deadline: 12/16/02)	Received	1-Mar-00	Adopted	1-Sep-00	Approved	18-Aug-01
PN Rule (Deadline: 5/6/04)	Received	1-Oct-03	Adopted	21-Jan-04	Projected	TBD
LCR MR (Deadline: 1/14/04)	Received	1-Oct-03	Adopted	21-Jan-04	Approved	28-Dec-06
Radionuclides Rule (Deadline: 12/7/04)	Received	5-Aug-04	Adopted	1-Dec-04	Approved	12-Sep-05
Arsenic Rule (Deadline: 1/21/05)	Received	5-Aug-04	Adopted	1-Dec-04	Approved	12-Sep-05
Filter Backwash Rule (Deadline: 6/8/05)	Received	4-May-04	Adopted	21-Jan-04	Approved	28-Dec-06
LT1 Rule (Deadline: 1/14/06)	Received	4-May-04	Adopted	21-Jan-04	Approved	28-Dec-06
Variances and Exemptions Rule (No Deadline)	Received	11-Oct-05	Adopted	2-Apr-02	TBD	TBD
Op Cert Program (Deadline: 9/30/02)	NA	NA	NA	NA	Approved	1-Jan-01
Op Cert Expense Reimbursement Grant	NA	NA	NA	NA	Approved	25-Sep-02
Stage 2 DBPR (Deadline: 1/4/2010)	Projected	14-Feb-12	Adopted	8-Jan-10	Projected	TBD
LT 2 IESWTR Rule (Deadline: 1/4/2010)	Projected	14-Feb-12	Adopted	8-Jan-10	Projected	TBD
GWR (Deadline: 10/11/08)	Projected	1-Oct-12	Adopted	8-Jan-10	Projected	TBD
LCR/STR (Deadline: 9/10/2011)	Projected	14-Feb-12	Adopted	26-Sep-11	Projected	TBD

APPENDIX F

(July 1, 2010 through June 30, 2011 SDWIS/Fed quarterly data)

FY 2011 Performance Activity Measures (PAM) Table

Code	Measure	EPA Average Goals			FY 2010 EPA R6 Results	Texas (TCEQ) Result	Status
			FY	TARGET			
211	Water Safe to Drink: Percentage of the population served by community water systems that receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection				90.7%	91.7%	Measure Met
			07	86.0%			
			08	88.0%			
			09	89.0%			
			10	88.0%			
			11	87.0%			
SP-1	Percentage of the community water systems that provide drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection				89.9%	92.0%	On Target
			07	NA			
			08	87.0%			
			09	87.0%			
			10	85.0%			
			11	85.0%			
SP-2	Percentage of "person months" during which community water systems provide drinking water that meets all applicable health-based drinking water standards				95.7%	96.5%	On Target
			07	NA			
			08	93.5%			
			09	95.0%			
			10	94.0%			
			11	94.0%			

APPENDIX G

FY 2011 Source Water Protection Performance Measure Table

Strategic Targets	Measure	EPA R6 Target	TCEQ Results	Status
SP 4(a)	Percent of the population served by community water systems where risk to public health is minimized through source water protection	36%	33% (= 1542 / 4709)	Below Target
SP 4(b)	Percent of the population served by community water systems where risk to public health is minimized by source water protection	60%	57% (= 14,331,305 / 25,149,762)	Below Target

FY 2011 Sanitary Survey Performance Measure Table
End-of-Year Results:

Code	Measure	EPA Target	TCEQ Result
SDW-1a	Percent of CWSs that have undergone a sanitary survey within three years of their last sanitary survey as required under the Interim Enhanced and Long-Term 1 Surface water Treatment Rules.	93%	92%

Appendix H Texas Top 50 Systems in Violation by Population 07/01/2010 THRU 06/30/2011			IOC			Rads	St1_DBP		SWTR		TCR	GWR
			Arsenic	Nitrate	Fluoride	CombRad	TTHM	HAA5	SWTR	LT1	TCR	GWR
POP	PWSID	PWSName	MCL	MCL	MCL	MCL	MCL	MCL	TT	TT	MCL	TT
631,253	TX0710002	El Paso Water Utilities Public Service B	2									
260,000	TX0430007	City Of Plano									1	
28,500	TX1750002	City Of Corsicana									1	
26,433	TX2270027	Travis County Wcid 17									1	
25,233	TX1140001	City Of Big Spring					2			1	1	
24,154	TX2200328	City Of Watauga									1	
23,389	TX2270014	City Of Pflugerville									1	
21,552	TX1330001	City Of Kerrville					3					
19,944	TX1110007	Acton Mud									2	
19,884	TX0940022	Springs Hill Wsc									1	
19,162	TX0010001	City Of Palestine								1		
18,766	TX0130001	City Of Beeville					2				1	
18,175	TX1610001	City Of Bay City	3									
17,559	TX1840008	Walnut Creek Sud					4					
16,572	TX1070190	West Cedar Creek Mud								1		
15,939	TX0310005	Laguna Madre Water District									1	
15,222	TX1230010	City Of Port Neches									1	
15,146	TX2250001	City Of Mount Pleasant									1	
14,643	TX0150138	East Central Sud						1				
12,500	TX2440001	City Of Vernon		4								1
11,457	TX0150039	City Of Alamo Heights									1	
11,295	TX2530002	Zapata County Waterworks Swtp								2		
10,565	TX2080001	City Of Snyder									1	
9,771	TX0460019	Clwsc Canyon Lake Shores									1	
9,729	TX1460003	City Of Liberty									2	
9,652	TX0020001	City Of Andrews	4		4							
9,282	TX2200022	City Of Richland Hills									1	
9,008	TX1090001	City Of Hillsboro									1	
8,505	TX1080067	Military Hwy Wsc Las Rusias Wtp									1	
8,379	TX1011250	Harris County Mud 150	2									
8,295	TX2200069	City Of River Oaks					3					
7,245	TX0430008	City Of Princeton									2	
7,149	TX0310003	City Of La Feria					1				1	
7,131	TX0890006	Gonzales County Wsc									1	
6,963	TX0370018	North Cherokee Wsc					4					
6,576	TX0030019	Central Wcid Of Angelina County									1	
6,183	TX0610264	Denton County Fwsd 1-A Castle Hills									1	
6,096	TX0270049	City Of Granite Shoals									1	
6,078	TX0830012	City Of Seminole	8									
5,900	TX1050018	Wimberley Wsc									1	
5,899	TX1200001	City Of Edna									1	
5,613	TX2360010	Riverside Wsc									1	
5,538	TX1990014	City Of Heath									1	
5,510	TX1240001	Jim Hogg County Wcid 2	4								1	
5,324	TX1540001	City Of Brady				14	4		1			
5,110	TX0140174	Central Texas College Killeen									1	
5,001	TX0310026	Olmito Wsc								8		
4,734	TX1280007	El Oso Wsc					1					
4,695	TX0730004	Tri County Sud	12									
1,456,709	#violations		35	4	4	14	24	1	1	13	34	1
	# systems		7	1	1	1	9	1	1	5	31	1
	Population served		683,742	12,500	9,652	5,324	115,575	14,643	5,324	77,263	634,877	12,500

APPENDIX I
FY 2011 Texas Systems in Violation
Summarizing FY 2011 SDWIS/Fed quarterly data
(Small <= 3,300; Medium 3,301 - 10,000; Large > 10,000)

				Community			Non-Transient Non-Community			Transient Non-Community		
Vtype	Rule	SubGroup	Contaminant	Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
M&R	Chem	IOC	Antimony, Total	40	4		3			10		
			Arsenic	43	4		3			10		
			Barium	40	4		3			10		
			Beryllium, Total	40	4		3			10		
			Cadmium	40	4		3			10		
			Chromium	40	4		3			10		
			Fluoride	51	6		2			17		
			Mercury	40	4		3			10		
			Nitrate	50	6		2			22		
			Nitrite	4						2		
			Selenium	40	4		3			10		
			Thallium, Total	40	4		3			10		
		SOC	1,2-DiBromo-3-Chloropropane				1					
			Atrazine	4	4		2					
			Benzo(a)pyrene	4	4		2					
			BHC-GAMMA	4	4		2					
			Chlordane	4	4		2					
			Di(2-ethylhexyl) adipate	4	4		2					
			Di(2-ethylhexyl) phthalate	4	4		2					
			Endrin	4	4		2					
			Ethylene DiBromide				1					
			Heptachlor	4	4		2					
			Heptachlor epoxide	4	4		2					
			Hexachlorobenzene	4	4		2					
			Hexachlorocyclopentadiene	4	4		2					
			LASSO	4	4		2					
			Methoxychlor	4	4		2					
			Pentachlorophenol	4	4		2					
			Simazine	4	4		2					
			Toxaphene	4	4		2					
		VOC	1,1,1-Trichloroethane	36			1			4		
			1,1,2-Trichloroethane	36			1			4		
			1,1-Dichloroethylene	36			1			4		
			1,2,4-Trichlorobenzene	36			1			4		
			1,2-Dichloroethane	36			1			4		
			1,2-Dichloropropane	36			1			4		
			Benzene	36			1			4		
			Carbon tetrachloride	36			1			4		
			Chlorobenzene	36			1			4		
			cis-1,2-Dichloroethylene	36			1			4		
			DiChloromethane	36			1			4		
			Ethylbenzene	36			1			4		
			o-Dichlorobenzene	36			1			4		
			p-Dichlorobenzene	36			1			4		
			Styrene	36			1			4		
			Tetrachloroethylene	36			1			4		
			Toluene	36			1			4		
			trans-1,2-Dichloroethylene	36			1			4		
			Trichloroethylene	36			1			4		
			Vinyl chloride	36			1			4		
			Xylenes, Total	36			1			4		
	DBPR	St1_DBP	Chlorine	105	2	1	16			4		
			Total Haloacetic Acids (HAA5)	25						1		
			TTHM	25						1		

APPENDIX I (Continued)

FY 2011 Texas Systems in Violation

Summarizing FY 2011 SDWIS/Fed. quarterly data
(Small ≤ 3,300; Medium 3,301 - 10,000; Large > 10,000)

				Community			Non-Transient Non-Community			Transient Non-Community		
Vtype	Rule	SubGroup	Contaminant	Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
M&R	GWR	GWR	E. COLI	133	23	22	29			93		
			GROUNDWATER RULE	6	1	2	2					
	SWTR	SWTRules	IESWTR	3	3							
	LCR	Lead & Copper Rule		1								
	Rads	Rads	Combined Radium (-226 & -228)	15								
			Combined Uranium	16								
			Gross Alpha, Excl. Radon & U	15								
	PN	Consumer Confidence Rule		435	11	6	1			5		
		Public Notice		794	93	55	199	1		541		
	TCR	Coliform (TCR)		327	32	13	109	1		287		
MCL	Chem	IOC	Arsenic	90	6	3	7			2		
			Fluoride	31	1	2				1		
			Nitrate	36		1	9			16		
			Selenium	2								
	DBPR	Stage 1	HAA5	12			1					
			TTHM	58	9	5	3					
	GWR	Groundwater Rule		2		1	1			4		
	SWTR	IESWTR		1	4	4	1					
	LCR			20			4			1		
	Rads	Combined Radium (-226 & -228)		24	3							
		Combined Uranium		6						1		
		Gross Alpha, Excl. Radon & U		24	3							
	TCR	Coliform (TCR)		42	15	15	18			27		

APPENDIX J

FY 2011 Texas Violations

Summarizing FY 2011 SDWIS/Fed quarterly data
(Small<=3,300; Medium 3,301 - 10,000; Large >10,000)

				Community			Non-Transient Non-Community			Transient Non-Community		
Vtype	Rule	SubGroup	Contaminant	Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
M&R	Chem	IOC	Antimony, Total	44	5		3			10		
			Arsenic	48	5		3			10		
			Barium	44	5		3			10		
			Beryllium, Total	44	5		3			10		
			Cadmium	44	5		3			10		
			Chromium	44	5		3			10		
			Fluoride	63	10		2			17		
			Mercury	44	5		3			10		
			Nitrate	55	10		2			24		
			Nitrite	4						2		
			Selenium	44	5		3			10		
			Thallium, Total	44	5		3			10		
		SOC	1,2-Dibromo-3-Chloropropane				1					
			Atrazine	6	12		2					
			Benzo(a)pyrene	6	12		2					
			BHC-GAMMA	6	12		2					
			Chlordane	6	12		2					
			Di(2-ethylhexyl) adipate	6	12		2					
			Di(2-ethylhexyl) phthalate	6	12		2					
			Endrin	6	12		2					
			Ethylene Dibromide				1					
			Heptachlor	6	12		2					
			Heptachlor epoxide	6	12		2					
			Hexachlorobenzene	6	12		2					
			Hexachlorocyclopentadiene	6	12		2					
			LASSO	6	12		2					
			Methoxychlor	6	12		2					
			Pentachlorophenol	6	12		2					
			Simazine	6	12		2					
			Toxaphene	6	12		2					
		VOC	1,1,1-Trichloroethane	38			1			4		
			1,1,2-Trichloroethane	38			1			4		
			1,1-Dichloroethylene	38			1			4		
			1,2,4-Trichlorobenzene	38			1			4		
			1,2-Dichloroethane	38			1			4		
			1,2-Dichloropropane	38			1			4		
			Benzene	38			1			4		
			Carbon tetrachloride	38			1			4		
			CHLOROBENZENE	38			1			4		
			cis-1,2-Dichloroethylene	38			1			4		
			DICHLOROMETHANE	38			1			4		
			Ethylbenzene	39			1			4		
			o-Dichlorobenzene	38			1			4		
			p-Dichlorobenzene	38			1			4		
			Styrene	38			1			4		

APPENDIX J(Continued)

FY 2011 Texas Violations

Summarizing FY 2011 SDWIS/Fed quarterly data
(Small<=3,300; Medium 3,301 - 10,000; Large >10,000)

				Community			Non-Transient Non-Community			Transient Non-Community		
Vtype	Rule	SubGroup	Contaminant	Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
M&R			Tetrachloroethylene	38			1			4		
			Toluene	38			1			4		
			trans-1,2-Dichloroethylene	38			1			4		
			Trichloroethylene	38			1			4		
			Vinyl chloride	38			1			4		
			Xylenes, Total	38			1			4		
	DBPR	St1_DBP	Chlorine	184	3	1	27			4		
			HAA5	28						1		
			TTHM	28						1		
	GWR	GWR	E. COLI	142	26	26	31			105		
			GROUNDWATER RULE	6	1	3	2					
	SWTR	SWTRules	IESWTR	11	14							
	LCR	Lead & Copper Rule		1								
	Rads	Rads	Combined Radium (-226 & -228)	16								
			Combined Uranium	17								
			Gross Alpha, Excl. Radon & U	16								
	PN	Consumer Confidence Rule		1549	25	13	2			18		
		Public Notice		2381	169	83	449	1		2083		
	TCR	Coliform (TCR)		581	36	13	201	1		717		
MCL	Chem	IOC	Arsenic	284	50	7	19			6		
			Fluoride	95	28	6				1		
			Nitrate	93		3	18			37		
			Selenium	3								
	DBPR	Stage 1	HAA5	30			3					
			TTHM	149	17	8	7					
	GWR	Groundwater Rule		2		1	1			5		
	SWTR	IESWTR		9	10	4	1					
	LCR			22			4			1		
	Rads	Combined Radium (-226 & -228)		39	13							
		Combined Uranium		8						2		
		Gross Alpha, Excl. Radon & U		37	4							
	TCR	Coliform (TCR)		44	17	16	18			28		

APPENDIX K

TOP Workplan Deliverables for FY11 (end of year report)

Activity	Originally Planned	Revised (08/10)	Projected (05/11)	Completed in FY11
SPEs (including Training) ⁽¹⁾	9	7	7	8
mCPEs/oCPEs ⁽²⁾	3	3	3	1
On-site Data Validation Audits ⁽³⁾	0	0	0	0
Staff Training Module Updates	2	2	0	0
DBP PBT Workshops ⁽⁴⁾	1	2	2	3
DBP PBT Weekly Follow-up	30	133	completed	120+
DAM Development and Updates	3	3	0	0
DAM Train-the-Trainer	2	1	0	0
DAM on-site QA/QC	7	4	2	2
Out-of-state AWOP meetings	3	3	3	2
In-state or VTC AWOP meeting	1	1	0	0
Quarterly Core Team meetings	4	4	3	3
TOP Recognition Program Awards	Several	several	2	2
TOP Articles/AWOP Reports	4	4	3	3
FOD Staff Conference** ⁽⁶⁾	1	1	0	0
VTCs ⁽⁵⁾	2	2	1	1
Coagulation & Mixing Module contract	0	0	0	0
Professional Development	6	6	9	completed
Revised SOPs for mCPEs and SPEs	2	2	1	0
Other Operator Training/Outreach ⁽⁷⁾	6	6	7	7
SDWIS conversion*	NA	NA		
UV, Membrane, and SW MOR updates*	NA	NA		
Electronic Data Reporting project*	NA	NA		

* Commitment to WSD

** Commitment to FOD

- (1) Palestine eSPE (Noble, Don, Clayton); Big Springs (Malcolm); Gladewater (Don, Noble, Teresa ^(1st)); Petrolia (Jack, Don); Olmito (Jack, Cindy, Teresa ^(2nd), Melanie Edwards ^(3rd), Chris Caudle ^(1st)); Carolyn Estates (Clayton, Kevin Glanton ^(1st)); Bridgeport (Cindy, Teresa ^(3rd), Marissa Ludwig ^(2nd)); Paris (Noble, Clayton, Kevin Glanton ^(2nd))
- (2) Gladewater (Cindy, Noble, Teresa, Jack, Clayton ^(3rd))
- (3)
- (4) Session 5 (October 2010); Session 6 (January 2011); Session 7 (August 2011)
- (5) 12-14-10 VTC (chloramine discussion), Jack
- (6) The staff conference was cancelled by TCEQ Management
- (7) TAWWA Back to Basics Teleconference, Jack; 4 TWUA Chapter Meetings, Don and Noble; PDW Conference, Jack & Cindy

Note: revised projection assuming Don Tharp's position remains vacant through the rest of FY11.